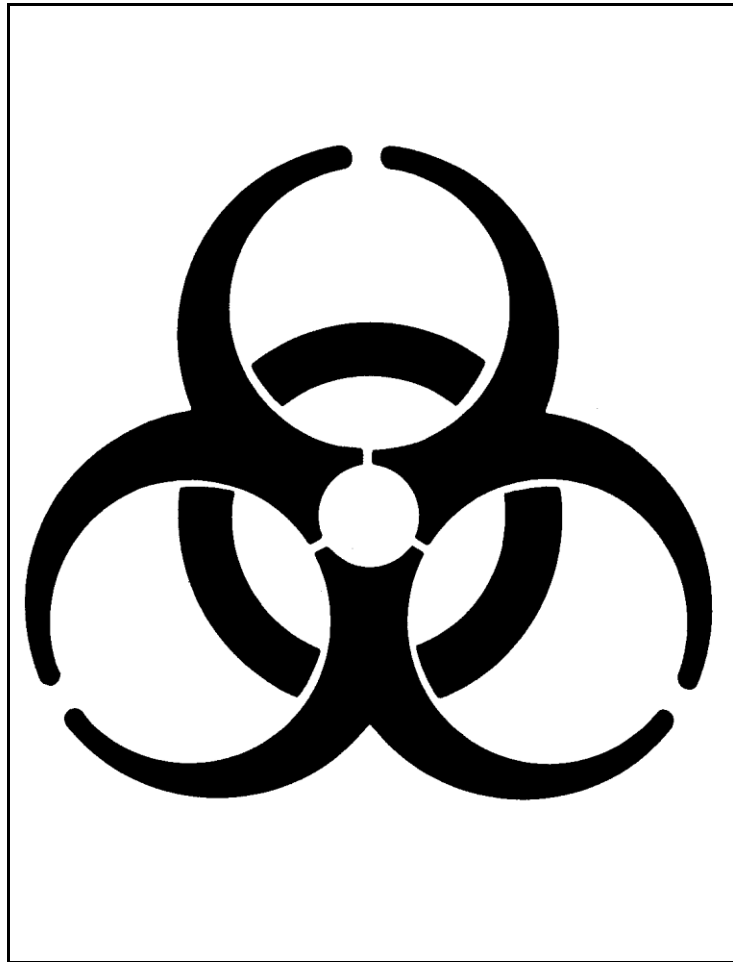


# **BLOODBORNE PATHOGENS**



**1910.1030**

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**29 CFR 1910.1030**  
**BLOODBORNE PATHOGENS**  
(As adopted by 803 KAR 2:320E)

**(a) Scope and Application.** This section applies to all occupational exposure to blood or other potentially infectious materials as defined by paragraph (b) of this section.

**(b) Definitions.** For purposes of this section, the following shall apply:

**"Assistant Secretary"** means the Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.

**"Blood"** means human blood, human blood components, and products made from human blood.

**"Bloodborne Pathogens"** means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

**"Clinical Laboratory"** means a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

**"Contaminated"** means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

**"Contaminated Laundry"** means laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

**"Contaminated Sharps"** means any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

**"Decontamination"** means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

**"Director"** means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designated representative.

**"Engineering Controls"** means controls (e.g., sharps disposal containers, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

**"Exposure Incident"** means a specific eye, mouth, other mucous

membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

**"Handwashing Facilities"** means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

**"Licensed Healthcare Professional"** is a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

**"Needleless Systems"** means a device that does not use needles for:

- (1) the collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established;
- (2) the administration of medication or fluids; or
- (3) any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

**"HBV"** means hepatitis B virus.

**"HIV"** means human immunodeficiency virus.

**"Occupational Exposure"** means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

**"Other Potentially Infectious Materials"** means

- (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;
- (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and
- (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**"Parenteral"** means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

**"Personal Protective Equipment"** is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered

to be personal protective equipment.

**"Production Facility"** means a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

**"Regulated Waste"** means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

**"Research Laboratory"** means a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

**"Sharps with Engineered Sharps Injury Protections"** means a nonneedle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

**"Source Individual"** means any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

**"Sterilize"** means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

**"Universal Precautions"** is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

**"Work Practice Controls"** means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

### **(c) Exposure Control.**

#### **(1) Exposure Control Plan**

- (i) Each employer having an employee(s) with occupational exposure as defined by paragraph (b) of this section shall establish a written Exposure Control Plan designed to eliminate or minimize employee exposure.

(ii) The Exposure Control Plan shall contain at least the following elements:

- (A) The exposure determination required by paragraph (c) (2),
- (B) The schedule and method of implementation for paragraphs (d) Methods of Compliance, (e) HIV and HBV Research Laboratories and Production Facilities, (f) Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up, (g) Communication of Hazards to Employees, and (h) Recordkeeping, of this standard, and
- (C) The procedure for the evaluation of circumstances surrounding exposure incidents as required by paragraph (f) (3) (i) of this standard.

(iii) Each employer shall ensure that a copy of the Exposure Control Plan is accessible to employees in accordance with 29 CFR 1910.20 (e) .

(iv) The Exposure Control Plan shall be reviewed and updated at least annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure. The review and update of such plans shall also:

- (A) reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens; and

- (B) document annually consideration and implementation of appropriate commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure.

(v) An employer, who is required to establish an Exposure Control Plan shall solicit input from non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls and shall document the solicitation in the Exposure Control Plan.

(vi) The Exposure Control Plan shall be made available to the Assistant Secretary and the Director upon request for examination and copying.

(2) Exposure Determination

(i) Each employer who has an employee(s) with occupational exposure as defined by paragraph (b) of this section shall prepare an exposure determination. This exposure determination shall contain the following:

- (A) A list of all job classifications in which all employees in those job classifications have occupational exposure;

- (B) A list of job classifications in which some employees have occupational exposure, and

(C) A list of all tasks and procedures or groups of closely related task and procedures in which occupational exposure occurs and that are performed by employees in job classifications listed in accordance with the provisions of paragraph (c) (2) (i) (B) of this standard.

(ii) This exposure determination shall be made without regard to the use of personal protective equipment.

**(d) Methods of Compliance.**

(1) General. Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

**(2) Engineering and Work Practice Controls**

(i) Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used.

(ii) Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

(iii) Employers shall provide handwashing facilities which are readily accessible to employees.

(iv) When provision of handwashing facilities is not feasible, the employer shall provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as feasible.

(v) Employers shall ensure that employees wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.

(vi) Employers shall ensure that employees wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

(vii) Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed except as noted in paragraphs (d) (2) (vii) (A) and (d) (2) (vii) (B) below. Shearing or breaking of contaminated needles is prohibited.

(A) Contaminated needles and other contaminated sharps shall not be recapped or removed unless the employer can demonstrate that no alternative is feasible or that such



action as required by a specific medical procedure.

(B) Such recapping or needle removal must be accomplished through the use of a mechanical device or a one-handed technique.

(viii) Immediately or as soon as possible after use, contaminated reusable sharps shall be placed in appropriate containers until properly reprocessed. These containers shall be:

(A) puncture resistant;

(B) labeled or color-coded in accordance with this standard;

(C) leakproof on the sides and bottom; and

(D) in accordance with the requirements set forth in paragraph (d)(4)(ii)(E) for reusable sharps.

(ix) Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.

(x) Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious materials are present.

(xi) All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.

(xii) Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

(xiii) Specimens of blood or other potentially infectious materials shall be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping.

(A) The container for storage, transport, or shipping shall be labeled or color-coded according to paragraph (g)(1)(i) and closed prior to being stored, transported, or shipped. When a facility utilizes Universal Precautions in the handling of all specimens, the labeling/color-coding of specimens is not necessary provided containers are recognizable as containing specimens. This exemption only applies while such specimens/containers remain within the facility. Labeling or color-coding in accordance with paragraph (g)(1)(i) is required when such specimens/containers leave the facility.

(B) If outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage during handling, processing, storage, transport, or shipping and is labeled or color-coded according to the requirements of this standard.

(C) If the specimen could puncture the primary container,

the primary container shall be placed within a secondary container which is puncture-resistant in addition to the above characteristics.

(xiv) Equipment which may become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless the employer can demonstrate that decontamination of such equipment or portions of such equipment is not feasible.

(A) A readily observable label in accordance with paragraph (g) (1) (i) (H) shall be attached to the equipment stating which portions remain contaminated.

(B) The employer shall ensure that this information is conveyed to all affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so that appropriate precautions will be taken.

### (3) Personal Protective Equipment

(i) Provision. When there is occupational exposure, the employer shall provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. Personal protective equipment will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

(ii) Use. The employer shall ensure that the employee uses appropriate personal protective equipment unless the employer shows that the employee temporarily and briefly declined to use personal protective equipment when, under rare and extraordinary circumstances, it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety of the worker or co-worker. When the employee makes this judgement, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.

(iii) Accessibility. The employer shall ensure that appropriate personal protective equipment in the appropriate sizes is readily accessible at the worksite or is issued to employees. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

(iv) Cleaning, Laundering, and Disposal. The employer shall clean, launder, and dispose of personal protective equipment

required by paragraphs (d) and (e) of this standard, at no cost to the employee.

(v) Repair and Replacement. The employer shall repair or replace personal protective equipment as needed to maintain its effectiveness, at no cost to the employee.

(vi) If a garment(s) is penetrated by blood or other potentially infectious materials, the garment(s) shall be removed immediately or as soon as feasible.

(vii) All personal protective equipment shall be removed prior to leaving the work area.

(viii) When personal protective equipment is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

(ix) Gloves. Gloves shall be worn when it can be reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin when performing vascular access procedures and when handling or touching contaminated items or surfaces.

(A) Disposable (single use) gloves such as surgical or examination gloves, shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

(B) Disposable (single use) gloves shall not be washed or decontaminated for re-use.

(C) Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

(D) Removed

(x) Masks, Eye Protection, and Face Shields. Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

(xi) Gowns, Aprons, and Other Protective Body Clothing. Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

(xii) Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated (e.g., autopsies, orthopaedic surgery).

(4) Housekeeping

(i) General. Employers shall ensure that the worksite is maintained in a clean and sanitary condition. The employer shall determine and implement an appropriate written schedule for cleaning and method of decontamination based upon the location within the facility, type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area.

(ii) All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.

(A) Contaminated work surfaces shall be decontaminated with an appropriate disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

(B) Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and environmental surfaces, shall be removed and replaced as soon as feasible when they become overtly contaminated or at the end of the workshift if they may have become contaminated during the shift.

(C) All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

(D) Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.

(E) Reusable sharps that are contaminated with blood or other potentially infectious materials shall not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.

(iii) Regulated Waste.

(A) Contaminated Sharps Discarding and Containment.

(1) Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

(i) Closable;

(ii) Puncture resistant;

(iii) Leakproof on sides and bottom;

(iv) Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard.

(2) During use, containers for contaminated sharps shall be:

(i) Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);

(ii) Maintained upright throughout use; and

(iii) Replaced routinely and not be allowed to overfill

(3) When moving containers of contaminated sharps from the area of use, the containers shall be:

(i) Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;

(ii) Placed in a secondary container if leakage is possible. The second container shall be:

(A) Closable;

(B) Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and

(C) Labeled or color-coded according to paragraph (g)(1)(i) of this standard.

(4) Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

(B) Other Regulated Waste Containment.

(1) Regulated waste shall be placed in containers which are:

(i) Closable;

(ii) Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

(iii) Labeled or color-coded in accordance with paragraph (g)(1)(i) this standard; and

(iv) Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

(2) If outside contamination of the regulated waste container occurs, it shall be placed in a second container. The second container shall be:

(a) Closable;

(b) Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

(c) Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard; and

(d) Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

(C) Disposal of all regulated waste shall be in accordance with applicable regulations of the United States, States and Territories, and political subdivisions of States and Territories.

(iv) Laundry.

(A) Contaminated laundry shall be handled as little as possible with a minimum of agitation.

(1) Contaminated laundry shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use.

(2) Contaminated laundry shall be placed and transported in bags or containers labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard. When a facility utilizes Universal Precautions in the handling of all soiled laundry, alternative labeling or color-coding is sufficient if it permits all employees to recognize the containers as requiring compliance with Universal Precautions.

(3) Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through or leakage from the bag or container, the laundry shall be placed and transported in bags or containers which prevent soak-through and/or leakage of fluids to the exterior.

(B) The employer shall ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.

(C) When a facility ships contaminated laundry off-site to a second facility which does not utilize Universal Precautions in the handling of all laundry, the facility generating the contaminated laundry must place such laundry in bags or containers which are labeled or color-coded in accordance with paragraph (g)(1)(i).

**(e) HIV and HBV Research Laboratories and Production Facilities.**

(1) This paragraph applies to research laboratories and production facilities engaged in the culture, production, concentration, experimentation, and manipulation of HIV and HBV. It does not apply to clinical or diagnostic laboratories engaged solely in the analysis of blood, tissues, or organs. These requirements apply in addition to the other requirements of the standard.

(2) Research laboratories and production facilities shall meet the following criteria:

(i) Standard Microbiological Practices. All regulated waste shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.

(ii) Special Practices

(A) Laboratory doors shall be kept closed when work involving HIV or HBV is in progress.

(B) Contaminated materials that are to be decontaminated at a site away from the work area shall be placed in a durable, leakproof, labeled or color-coded container that is closed before being removed from the work area.

(C) Access to the work area shall be limited to authorized persons. Written policies and procedures shall be established whereby only persons who have been advised of the potential biohazard, who meet any specific entry requirements, and who comply with all entry and exit procedures shall be allowed to enter the work areas and animal rooms.

(D) When other potentially infectious materials or infected animals are present in the work area or containment module, a hazard warning sign incorporating the universal biohazard symbol shall be posted on all access doors. The hazard warning sign shall comply with paragraph (g)(1)(ii) of this standard.

(E) All activities involving other potentially infectious materials shall be conducted in biological safety cabinets or other physical-containment devices within the containment module. No work with these other potentially infectious materials shall be conducted on the open bench.

(F) Laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing shall be used in the work area and animal rooms. Protective clothing shall not be worn outside of the work area and shall be decontaminated before being laundered.

(G) Special care shall be taken to avoid skin contact with other potentially infectious materials. Gloves shall be worn when handling infected animals and when making hand contact with other potentially infectious materials is unavoidable.

(H) Before disposal all waste from work areas and from

animal rooms shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.

(I) Vacuum lines shall be protected with liquid disinfectant traps and high-efficiency particulate air (HEPA) filters or filters of equivalent or superior efficiency and which are checked routinely and maintained or replaced as necessary.

(J) Hypodermic needles and syringes shall be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe-needle units (i.e., the needle is integral to the syringe) shall be used for the injection or aspiration of other potentially infectious materials. Extreme caution shall be used when handling needles and syringes. A needle shall not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe shall be promptly placed in a puncture-resistant container and autoclaved or decontaminated before reuse or disposal.

(K) All spills shall be immediately contained and cleaned up by appropriate professional staff or others properly trained and equipped to work with potentially concentrated infectious materials.

(L) A spill or accident that results in an exposure incident shall be immediately reported to the laboratory director or other responsible person.

(M) A biosafety manual shall be prepared or adopted and periodically reviewed and updated at least annually or more often if necessary. Personnel shall be advised of potential hazards, shall be required to read instructions on practices and procedures, and shall be required to follow them.

(iii) Containment Equipment.

(A) Certified biological safety cabinets (Class I, II, or III) or other appropriate combinations of personal protection or physical containment devices, such as special protective clothing, respirators, centrifuge safety cups, sealed centrifuge rotors, and containment caging for animals, shall be used for all activities with other potentially infectious materials that pose a threat of exposure to droplets, splashes, spills, or aerosols.

(B) Biological safety cabinets shall be certified when installed, whenever they are moved and at least annually.

(3) HIV and HBV research laboratories shall meet the following criteria:

(i) Each laboratory shall contain a facility for hand washing and an eye wash facility which is readily available within the work area.

(ii) An autoclave for decontamination of regulated waste shall be



available.

(4) HIV and HBV production facilities shall meet the following criteria:

(i) The work areas shall be separated from areas that are open to unrestricted traffic flow within the building. Passage through two sets of doors shall be the basic requirement for entry into the work area from access corridors or other contiguous areas. Physical separation of the high-containment work area from access corridors or other areas or activities may also be provided by a double-doored clothes-change room (showers may be included), airlock, or other access facility that requires passing through two sets of doors before entering the work area.

(ii) The surfaces of doors, walls, floors and ceilings in the work area shall be water resistant so that they can be easily cleaned. Penetrations in these surfaces shall be sealed or capable of being sealed to facilitate decontamination.

(iii) Each work area shall contain a sink for washing hands and a readily available eye wash facility. The sink shall be foot, elbow, or automatically operated and shall be located near the exit door of the work area.

(iv) Access doors to the work area or containment module shall be self-closing.

(v) An autoclave for decontamination of regulated waste shall be available within or as near as possible to the work area.

(vi) A ducted exhaust-air ventilation system shall be provided. This system shall create directional airflow that draws air into the work area through the entry area. The exhaust air shall not be recirculated to any other area of the building, shall be discharged to the outside, and shall be dispersed away from occupied areas and air intakes. The proper direction of the airflow shall be verified (i.e., into the work area).

(5) Training Requirements. Additional training requirements for employees in HIV and HBV research laboratories and HIV and HBV production facilities are specified in paragraph (g)(2)(ix).

**(f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.**

(1) General

(i) The employer shall make available the hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure incident.

(ii) The employer shall ensure that all medical evaluations and procedures including the hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up, including prophylaxis, are:

(A) Made available at no cost to the employee;

(B) Made available to the employee at a reasonable time and place;

(C) Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional; and

(D) Provided according to recommendations of the U.S. Public Health Service current at the time these evaluations and procedures take place, except as specified by this paragraph (f).

(iii) The employer shall ensure that all laboratory tests are conducted by an accredited laboratory at no cost to the employee.

## (2) Hepatitis B Vaccination

(i) Hepatitis B vaccination shall be made available after the employee has received the training required in paragraph (g)(2)(vii)(I) and within 10 working days of initial assignment to all employees who have occupational exposure unless the employee has previously received the complete hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.

(ii) The employer shall not make participation in a prescreening program a prerequisite for receiving hepatitis B vaccination.

(iii) If the employee initially declines hepatitis B vaccination but at a later date while still covered under the standard decides to accept the vaccination, the employer shall make available hepatitis B vaccination at that time.

(iv) The employer shall assure that employees who decline to accept hepatitis B vaccination offered by the employer sign the statement in Appendix A.

(v) If a routine booster dose(s) of hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster dose(s) shall be made available in accordance with section (f)(1)(ii).

(3) Post-exposure Evaluation and Follow-up. Following a report of an exposure incident, the employer shall make immediately available to the exposed employee a confidential medical evaluation and follow-up, including at least the following elements:

(i) Documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred;

(ii) Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law;

(A) The source individual's blood shall be tested as soon as

feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the employer shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.

(B) When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.

(C) Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

(iii) Collection and testing of blood for HBV and HIV serological status;

(A) The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained.

(B) If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.

(iv) Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service;

(v) Counseling; and

(vi) Evaluation of reported illnesses.

(4) Information Provided to the Healthcare Professional

(i) The employer shall ensure that the healthcare professional responsible for the employee's Hepatitis B vaccination is provided a copy of this regulation.

(ii) The employer shall ensure that the healthcare professional evaluating an employee after an exposure incident is provided the following information:

(A) A copy of this regulation;

(B) A description of the exposed employee's duties as they relate to the exposure incident;

(C) Documentation of the route(s) of exposure and circumstances under which exposure occurred;

(D) Results of the source individual's blood testing, if available; and

(E) All medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain.

(5) Healthcare Professional's Written Opinion. The employer shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation.

(i) The healthcare professional's written opinion for Hepatitis B vaccination shall be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.

(ii) The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:

(A) That the employee has been informed of the results of the evaluation; and

(B) That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

(iii) All other findings or diagnoses shall remain confidential and shall not be included in the written report.

(6) Medical Recordkeeping. Medical records required by this standard shall be maintained in accordance with paragraph (h)(1) of this section.

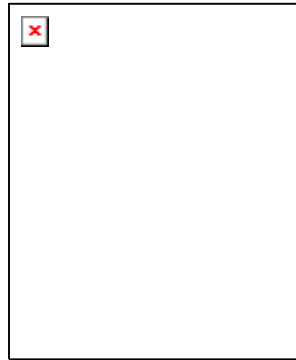
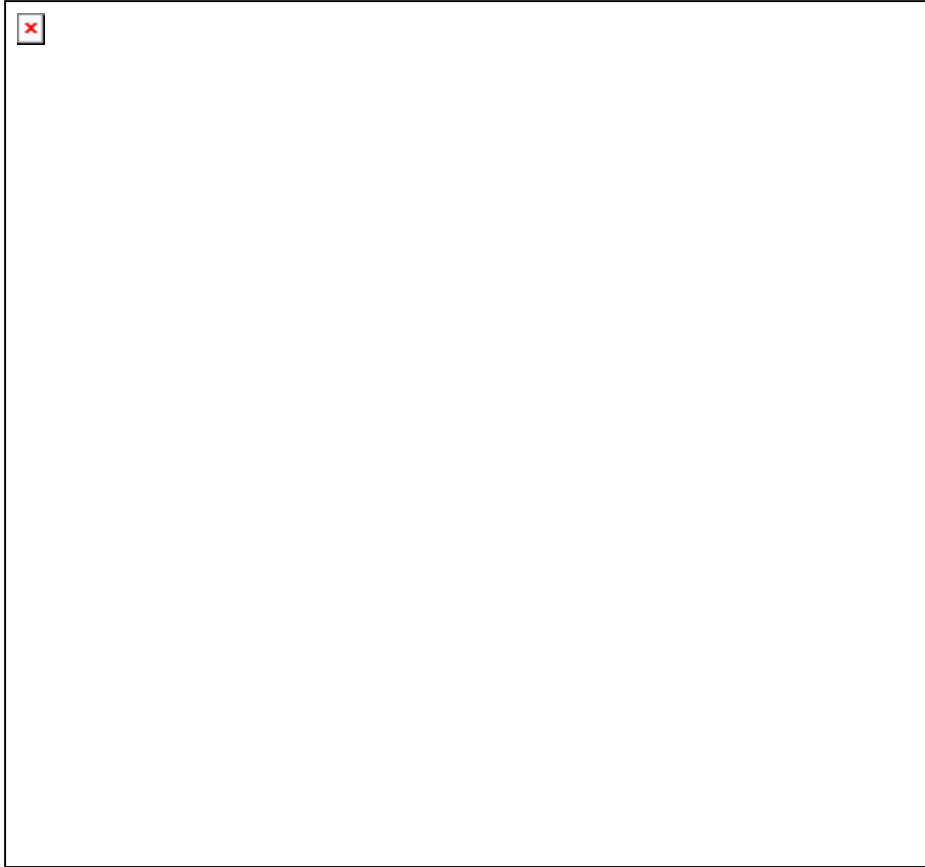
**(g) Communication of Hazards to Employees.**

(1) Labels and Signs

(i) Labels.

(A) Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material; and other containers used to store, transport or ship blood or other potentially infectious materials, except as provided in paragraph (g)(1)(i)(E), (F) and (G).

(B) Labels required by this section shall include the following legend:



(C) These labels shall be fluorescent orange or orange-red or predominantly so, with lettering or symbols in a contrasting color.

(D) Labels required by paragraph (g)(1)(i) shall either be an integral part of the container or shall be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.

(E) Red bags or red containers may be substituted for labels.

(F) Containers of blood, blood components, or blood products

that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirements of paragraph (g).

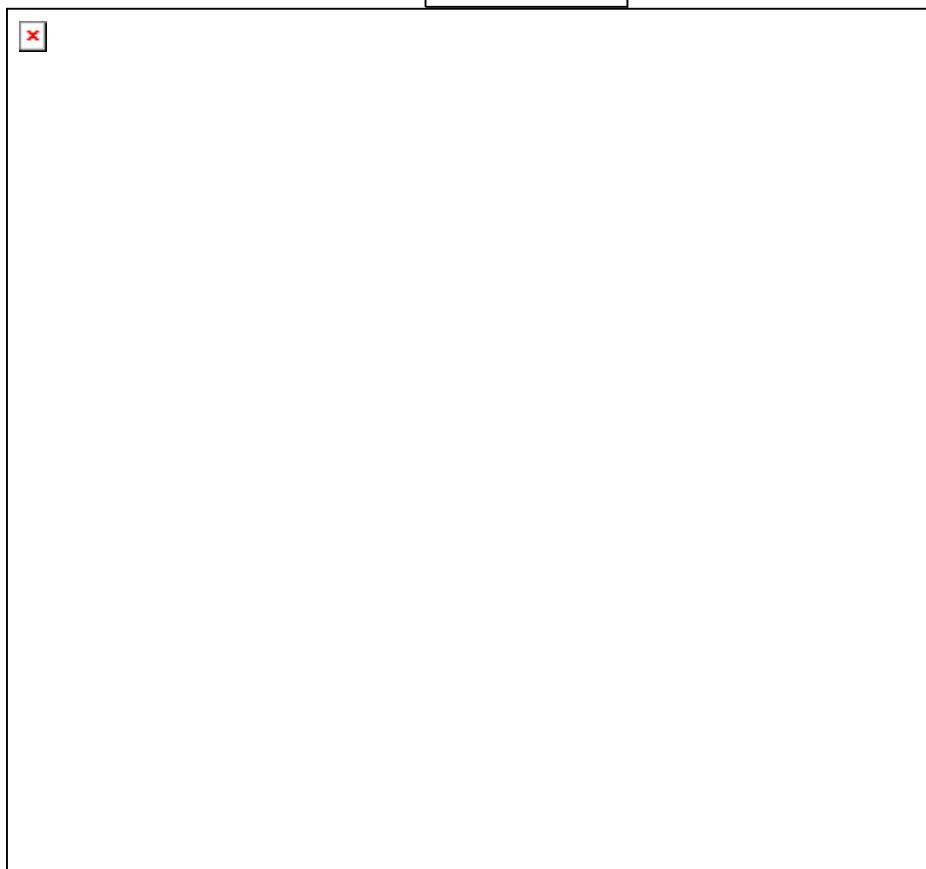
(G) Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.

(H) Labels required for contaminated equipment shall be in accordance with this paragraph and shall also state which portions of the equipment remain contaminated.

(I) Regulated waste that has been decontaminated need not be labeled or color-coded.

(ii) Signs.

(A) The employer shall post signs at the entrance to work areas specified in paragraph (e), HIV and HBV Research Laboratory and Production Facilities, which shall bear the following legend:



(Name of the

Infectious Agent)  
(Special requirements for entering the area)  
(Name, telephone number of the laboratory director or other  
responsible person.)

(B) These signs shall be fluorescent orange-red or predominantly so, with lettering or symbols in a contrasting color.

(2) Information and Training

(i) Employers shall ensure that all employees with occupational exposure participate in a training program which must be provided at no cost to the employee and during working hours.

(ii) Training shall be provided as follows:

(A) At the time of initial assignment to tasks where occupational exposure may take place;

(B) Within 90 days after the effective date of the standard;  
and

(C) At least annually thereafter.

(iii) For employees who have received training on bloodborne pathogens in the year preceding the effective date of the standard, only training with respect to the provisions of the standard which were not included need be provided.

(iv) Annual training for all employees shall be provided within one year of their previous training.

(v) Employers shall provide additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.

(vi) Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used.

(vii) The training program shall contain at a minimum the following elements:

(A) An accessible copy of the regulatory text of this standard and an explanation of its contents;

(B) A general explanation of the epidemiology and symptoms of bloodborne diseases;

(C) An explanation of the modes of transmission of bloodborne pathogens;

(D) An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan;

(E) An explanation of the appropriate methods for recognizing tasks and other activities that may involve

exposure to blood and other potentially infectious materials;

(F) An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;

(G) Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;

(H) An explanation of the basis for selection of personal protective equipment;

(I) Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;

(J) Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;

(K) An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available;

(L) Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident;

(M) An explanation of the signs and labels and/or color coding required by paragraph (g)(1); and

(N) An opportunity for interactive questions and answers with the person conducting the training session.

(viii) The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address.

(ix) Additional Initial Training for Employees in HIV and HBV Laboratories and Production Facilities. Employees in HIV or HBV research laboratories and HIV or HBV production facilities shall receive the following initial training in addition to the above training requirements.

(A) The employer shall assure that employees demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with HIV or HBV.

(B) The employer shall assure that employees have prior experience in the handling of human pathogens or tissue cultures before working with HIV or HBV.



(C) The employer shall provide a training program to employees who have no prior experience in handling human pathogens. Initial work activities shall not include the handling of infectious agents. A progression of work activities shall be assigned as techniques are learned and proficiency is developed. The employer shall assure that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.

**(h) Recordkeeping.**

**(1) Medical Records**

(i) The employer shall establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29 CFR 1910.20.

(ii) This record shall include:

(A) The name and social security number of the employee;

(B) A copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination as required by paragraph (f) (2);

(C) A copy of all results of examinations, medical testing, and follow-up procedures as required by paragraph (f) (3);

(D) The employer's copy of the healthcare professional's written opinion as required by paragraph (f) (5); and

(E) A copy of the information provided to the healthcare professional as required by paragraphs (f) (4) (ii) (B) (C) and (D).

(iii) Confidentiality. The employer shall ensure that employee medical records required by paragraph (h) (1) are

(A) Kept confidential; and

(B) Are not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by this section or as may be required by law.

(iv) The employer shall maintain the records required by paragraph (h) for at least the duration of employment plus 30 years in accordance with 29 CFR 1910.20.

**(2) Training Records**

(i) Training records shall include the following information:

(A) The dates of the training sessions;

(B) The contents or a summary of the training sessions;

(C) The names and qualifications of persons conducting the training; and

(D) The names and job titles of all persons attending the training sessions.

(ii) Training records shall be maintained for 3 years from the date on which the training occurred.

(3) Availability

(i) The employer shall ensure that all records required to be maintained by this section shall be made available upon request to the Assistant Secretary and the Director for examination and copying.

(ii) Employee training records required by this paragraph shall be provided upon request for examination and copying to employees, to employee representatives, to the Director, and to the Assistant Secretary in accordance with 29 CFR 1910.20.

(iii) Employee medical records required by this paragraph shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, to the Director, and to the Assistant Secretary in accordance with 29 CFR 1910.20.

(4) Transfer of Records

(i) The employer shall comply with the requirements involving transfer of records set forth in 29 CFR 1910.20(h).

(ii) If the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify the Director, at least three months prior to their disposal and transmit them to the Director, if required by the Director to do so, within that three month period.

(5) Sharps Injury Log.

(i) The employer shall establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log shall be recorded and maintained in such manner as to protect the confidentiality of the injured employee. The sharps injury log shall contain, at a minimum:

(A) the type and brand of device involved in the incident,

(B) the department or work area where the exposure incident occurred, and

(C) an explanation of how the incident occurred.

(ii) The requirement to establish and maintain a sharps injury log shall apply to any employer who is required to maintain a log of occupational injuries and illnesses under 29 CFR 1904.

(iii) The sharps injury log shall be maintained for the period

required by 29 CFR 1904.6.

**(i) Dates.**

(1) Effective Date. The standard shall become effective on March 6, 1992.

(2) The Exposure Control Plan required by paragraph (c)(2) of this section shall be completed on May 5, 1992.

(3) Paragraph (g)(2) Information and Training and (h) Recordkeeping shall take effect on June 4, 1992.

(4) Paragraphs (d)(2) Engineering and Work Practice Controls, (d)(3) Personal Protective Equipment, (d)(4) Housekeeping, (e) HIV and HBV Research Laboratories and Production Facilities, (f) Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up, and (g)(1) Labels and Signs, shall take effect on July 6, 1992.

**(j) Appendix.**

**APPENDIX A  
(Mandatory)**

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

**NOTES:**

## TYPES OF VIRAL HEPATITIS

Five type of viral hepatitis have been identified (see table below). They have similar clinical features, but vary significantly in modes of transmission, prevalence and outcome.

**TYPES OF HEPATITIS**

Type of hepatitis	Mode of Transmission	Incubation Period	Serological Tests	Complications
A	Fecal/oral	15 to 50 days	Available	Rapid, intense hepatitis Relapse
B	Parenteral Sexual Perinatal	40 to 180 days	Available	Rapid, intense hepatitis Chronic liver disease Cirrhosis Primary hepatocellular carcinoma
C	Parenteral	35 to 75 days	Available	Chronic liver disease Cirrhosis Primary hepatocellular carcinoma
D	Parenteral Sexual Perinatal	21 to 49 days	Available	Chronic liver disease Rapid, intense hepatitis
E	Fecal/oral	28 to 42 days	Not widely available	High mortality in pregnant women Fetal death

### **Hepatitis A (Formerly called 'infectious' hepatitis)**

- \*Primarily transmitted by fecal-oral, person-to-person contact; also by contaminated uncooked shellfish, fruits, vegetables and contaminated water.
- \*Pre-exposure prophylaxis: immune globulin (IG) given before exposure; recommended for certain international travelers.
- \*Responsible for 50% of reported cases of hepatitis in the United States in 1988.

### **Hepatitis B (Formerly called 'serum' hepatitis)**

- \*Transmitted via blood or body fluids at birth or during early childhood, through sexual contact and by contaminated needles.

\*Persons with chronic hepatitis B infection could subsequently develop chronic liver disease, cirrhosis and primary liver cancer.

\*An estimated 300,000 people in the United States are infected with the hepatitis B virus annually; more than 10,000 require hospitalization, and on average 5,000 people die as a result of the chronic liver disease, cirrhosis and primary liver cancer.

### **Hepatitis C (Non-A, non-B hepatitis)**

\*Parenterally transmitted non-A, non-B hepatitis virus.

\*Traditionally associated with blood transfusions, but parenteral drug users and dialysis patients are also considered at-risk groups.

\*Accounts for 20% to 40% of acute viral hepatitis in the United States.

### **Hepatitis D (Delta-agent hepatitis)**

\*May cause infection only in the presence of active HBV infection.

\*Co-infection with delta-agent intensifies the acute symptoms of hepatitis B.

\*Prevention of HBV infection also prevents HDV infection, since HDV is dependent on HBV for replication.

### **Hepatitis E (Enterically transmitted non-A, non-B hepatitis)**

\*First identified through waterborne epidemics in developing countries; sporadic cases also occur.

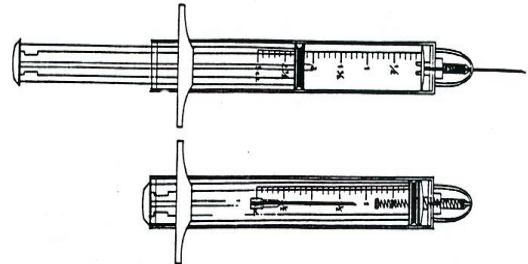
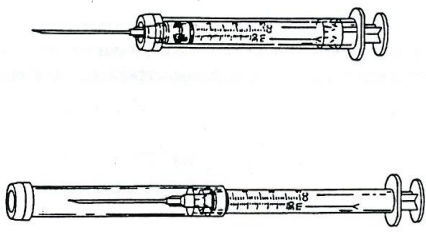
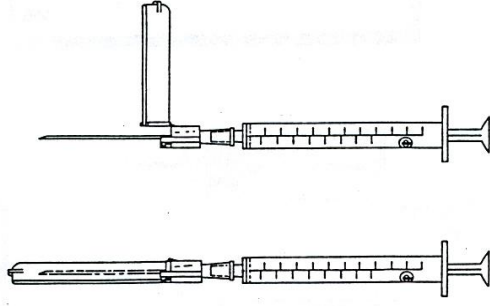
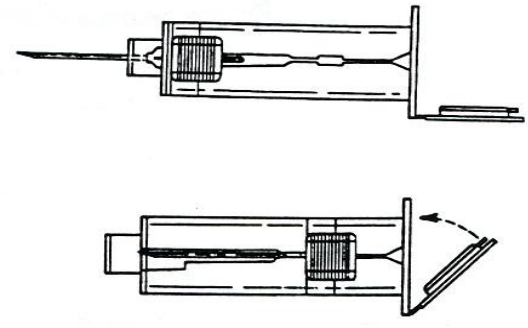
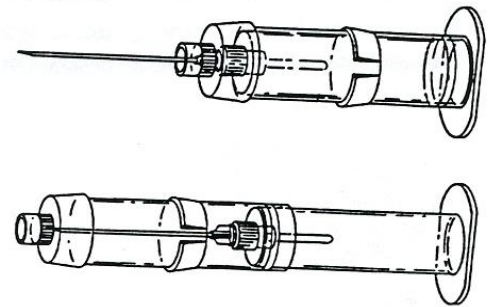
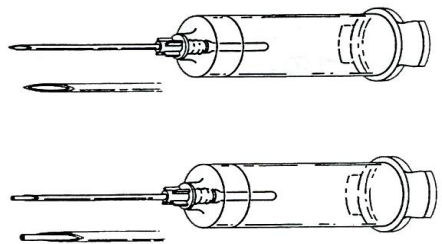
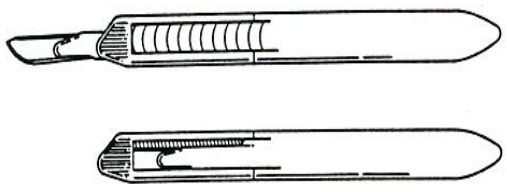
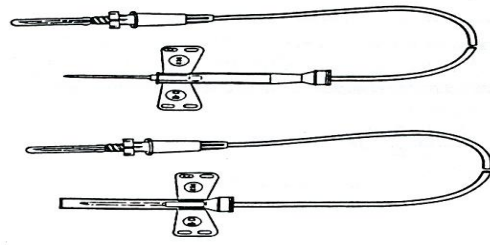

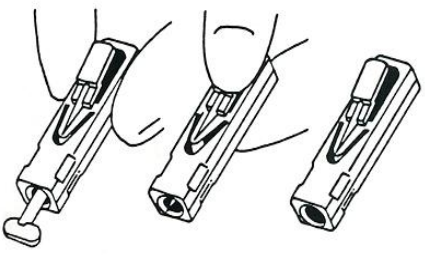
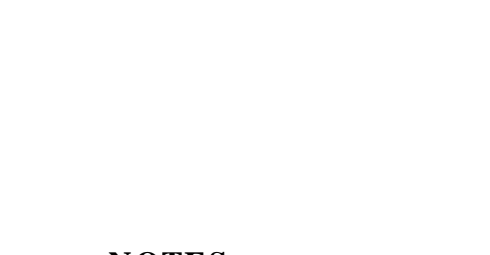
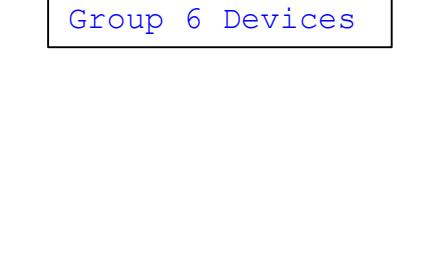
\*Mild disease except in women in the third trimester of pregnancy in whom the mortality rate is high.

\*Neither a carrier state nor chronic liver disease has been reported.

## **HEPATITIS B, THE MOST SERIOUS OF THE HEPATITIS VIRUSES, IS VACCINE-PREVENTABLE**

# Examples of Safer Medical Devices

Most newer devices can be classified by the type of engineering controls employed to keep the employee shielded from the sharp after potential contamination with biohazardous materials has occurred. These engineering developments can be classified into six basic groups shown below.

Group 1 Devices	Group 2 Devices	Group 3 Devices
		
		
		
		
	NOTES:	

*These examples are used for illustration purposes only. It is not the intention of this document to endorse, advertise for, or against any product shown or not shown. None of these devices are approved by or advocated by OSHA or the Consultation Branch. These devices pictured are intended only to be used as examples of devices in each group of devices available on the market today.*

Most newer “safer medical devices” can be classified by the type of engineering controls employed to keep the employee shielded from the sharp after it has been contaminated with potentially biohazardous materials. These engineering developments can be classified into six generic groups. Pictures of these classes of devices are shown on the previous page.

**Group one** consists of devices which, after use, allow for the retraction and shielding of the contaminated sharp by an **integrated sheath**. Here the potentially contaminated sharp is retracted into the body of the device. These can be seen in the first column of the chart and can encompass a variety of medical sharps including syringes, scalpels, lancets, and assorted devices for vascular access.

**Group two** consists of devices in which the contaminated sharp **is covered after use** by an integrated external sheath. This sheath must be pulled over the contaminated sharp and locked in place to shield the sharp from inadvertently contacting with the employee.

**Group three** devices are limited to apparatus or equipment in which the safety **sheath must first be manipulated to uncover the sharp, and again after contamination has occurred to cover the now potentially contaminated sharp**. These are usually syringes but devices for vascular access and other more complex devices exist in this category as well.

**Group four** devices are those in which the sharp is exposed during a procedure. An example might well be (canulation), puncturing and placement of a tube into an artery or vein to afford IV access or placement of a deep line into a major artery or vein, before surgery. The medical device is contaminated during the procedure. Upon finishing the procedure **a stylus is introduced through the bore of the needle to create a blunt end instead of the sharp point** to afford protection to the employee.

**Group five** devices **take away the sharp entirely** and use a gaseous delivery system. Medicines are introduced through a small opening made in the patient's skin by pressure that is delivered in a narrow point on and then under the skin. These include systems like the Bioject®, Vitaject®, and other gaseous / mechanical delivery systems.

**Group six** devices **are in an experimental stage** and no pictures were available. These unique devices employ everything from needles that are microscopic in size and deliver ultra-pure microdoses of medicinal derivatives from drugs currently on the market, to the devices that will ultimately dissolve due to the body's chemical nature and temperature after a single usage. We should begin to see these devices in the next several years. Designer virus' delivery and inhaleable delivery vehicles are on the horizon as well.



# SAMPLE BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

## Note:

This sample plan is provided only as a guide to assist in complying with the OSHA Bloodborne Pathogens standard 29 CFR 1910.1030, as adopted by 803 KAR 2:320. It is not intended to supersede the requirements detailed in the standard. Employers should review the standard for particular requirements which are applicable to their situation. It should be noted that this model program does not include provisions for HIV/HBV laboratories and research facilities which are addressed in section (a) of the standard. Employers will need to add information relevant to their particular facility in order to develop an effective, comprehensive exposure control plan. Employers should note that the exposure control plan is expected to be reviewed at least on an annual basis and updated when necessary.

## **BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN**

Facility Name: \_\_\_\_\_

Date of Preparation: \_\_\_\_\_

In accordance with the OSHA Bloodborne Pathogens standard, 29 CFR 1910.1030, as adopted by 803 KAR 2:320, the following exposure control plan has been developed:

### **1. EXPOSURE DETERMINATION**

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment). This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. At this facility the following job classification are in the category:

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In addition, OSHA requires a listing of job classifications in which some employees

may have occupational exposure. Since not all the employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks or procedures that would cause these employees to have occupational exposure are also required to be listed in order to clearly understand which employees in these categories are considered to have occupational exposure.

The job classifications and associated tasks for these categories are as follows:

(The employer could use a checklist as follows:

<b>JOB CLASSIFICATIONS</b>	<b>TASK/PROCEDURES</b>

## **2. IMPLEMENTATION SCHEDULE AND METHODOLOGY**

OSHA also requires that this plan also include a schedule and method of implementation for the various requirements of the standard. The following complies with this requirement:

### **COMPLIANCE METHODS**

Universal precautions will be observed at this facility in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual.

Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees at this facility. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be utilized. At this facility the following engineering controls will be utilized: (list controls, such as sharps container, etc.)

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The above controls will be examined and maintained on a regular schedule. The schedule for reviewing the effectiveness of the controls is as follows: (list schedule such as daily, once/week, etc. as well as list who has the responsibility to review the effectiveness of the individual controls, such as the supervisor for each department, etc).

Handwashing facilities are also available to the employees who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after incurring exposure.

At this facility handwashing facilities are located: (list locations, such as patient rooms, procedure areas, etc. If handwashing facilities are not feasible, the employer is required to provide either an antiseptic cleanser in conjunction with a clean cloth/paper towels or antiseptic towelettes. If these alternatives are used then the hands are to be washed with soap and running water as soon as feasibly possible. Employers who must provide alternatives to readily accessible handwashing facilities should list the location, tasks, and responsibilities to ensure maintenance and accessibility of these alternatives).

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After removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area IMMEDIATELY or soon as feasibly possible with soap and water.

If employees incur exposure to their skin or mucous membranes then those areas shall be washed or flushed with water as appropriate as soon as feasibly possible following contact.

## **NEEDLES**

Contaminated needles and other contaminated sharps will not be bent, recapped, removed, sheared or purposely broken. OSHA allows an exception to this if the procedure would require that the contaminated needles be recapped or removed and no alternative is feasible and the action is required by the medical procedure. If such action is required then the recapping or removal of the needle must be done by the use of a mechanical device or an one-handed technique. At this facility recapping or removal is only permitted for the following procedures: (List the procedures and also list the mechanical device to be used or alternately if an one-handed technique will be used).

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## **CONTAINERS FOR REUSABLE SHARPS**

Contaminated sharps that are reusable to be placed immediately, or as soon as possible, after use into an appropriate sharps container.

At this facility the sharps containers are puncture resistant, labeled with a biohazard label, and are leak proof. (Employers should list here where sharps containers are located as well as who has responsibility for removing sharps from containers and how often the containers will be checked to remove the sharps).

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## **WORK AREA RESTRICTIONS**

In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials are present.

Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

All procedures will be conducted in a manner which will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials. Methods which will be employed at this facility to accomplish this goal are: (list methods, such as covers on centrifuges, usage of dental dams if appropriate, etc).

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## **SPECIMENS**

Specimens of blood or other potentially infectious materials will be placed in a container which prevents leakage during the collection, handling, processing, storage, and transport of the specimens.

The container used for this purpose will be labeled or color coded in accordance with the requirements of the OSHA standard.

(Employers should note that the standard provides for an exemption for specimens from the labeling/color coding requirement of the standard provided that the facility utilizes universal precautions in the handling of all specimens and the containers are recognizable as containing specimens. This exemption applies only while the specimens remain in the facility). If the employer chooses to use this exemption then it should be stated below:

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Any specimens which could puncture a primary container will be placed within a secondary container which is puncture resistant. (The employer should list here how this will be carried out, e.g. which specimens, if any, could puncture a primary container, which containers can be used as a secondary containers and where the secondary containers are located at the facility).

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If outside contamination of the primary container occurs, the primary container shall be placed within a secondary container which prevents leakage during the handling, processing, storage, transport, or shipping of the specimen.

## **CONTAMINATED EQUIPMENT**

Equipment which has become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible. (Employers should list here any equipment which it is felt can not be decontaminated prior to servicing).

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## PERSONAL PROTECTIVE EQUIPMENT

All personal protective equipment used at this facility will be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

Protective clothing will be provided to employees in the following manner: (List how the clothing will be provided to employees, e.g. who has responsibility for distribution, etc. and also list which procedures would require the protective clothing and the type of protection required, this could also be listed as an appendix to this program).

The employer could use a checklist as follows:

PERSONAL PROTECTIVE EQUIPMENT	TASK
Gloves	
Lab Coats	
Face Shield	
Clinic Jacket	
Protective Eye Wear (with solid side shield)	
Surgical Gown	
Shoe Covers	
Utility Gloves	
Examination Gloves	
Other PPE (List)	

All personal protective equipment will be cleaned, laundered, and disposed of by the employer at no cost to the employees. All repairs and replacements will be made by the employer at no cost to employees.

All garments which are penetrated by blood shall be removed immediately or as soon as feasibly possible. All personal protective equipment will be removed prior to leaving the work area. The following protocol has been developed to

facilitate leaving the equipment at the work area: (list where employees are expected to place the personal protective equipment upon leaving the work area, and other protocols, etc.).

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Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes.

Gloves will be available from (state location and/or person who will be responsible for distribution of gloves)

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Gloves will be used for the following procedures:

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Disposable gloves used at this facility are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasibly possible if they are torn, punctured, or when their ability to function as a barrier is compromised. Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

Masks in combination with eye protection devices, such as goggles or glasses with solid state shield, or chin length face shields, are required to be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can reasonably be anticipated. Situations at this facility which would require such protection are as follows:

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This OSHA standard also requires appropriate protective clothing to be used, such as lab coats, gowns, aprons, clinic jackets, or similar outer garments. The following situations require that such protective clothing be utilized:

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This facility will be cleaned and decontaminated according to the following schedule:  
(list area and schedule)

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Decontamination will be accomplished by utilizing the following materials: (list the  
materials which will be utilized, such as bleach solutions or EPA registered germicides)

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All contaminated work surfaces will be decontaminated after completion of procedures  
and immediately or as soon as feasibly possible after any spillage of blood or other  
potentially infectious materials, as well as at the end of the work shift if the surface  
may have become contaminated since the last cleaning. (Employers should add in any  
information concerning the usage of protective coverings, such as plastic wrap which  
they may be using to assist in keeping surfaces free of contamination).

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All bins, pails, cans and similar receptacles shall be inspected and decontaminated on a  
regularly scheduled basis (list frequency and by whom).

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Any broken glassware which may be contaminated will not be picked up directly  
with other hands. The following procedures will be used:

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## **REGULATED WASTE DISPOSAL**

All contaminated sharps shall be discarded as soon as feasibly possible in sharps



containers which are located in the facility. Sharps containers are located in (specify locations of sharps containers)

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Regulated waste other than sharps shall be placed in appropriate containers. Such containers are located in (specify locations of containers).

## **LAUNDRY PROCEDURES**

Laundry contaminated with blood or other potentially infectious materials will be handled as little as possible. Such laundry will be placed in appropriately marked bags at the location where it was used. Such laundry will not be sorted or rinsed in the area of use.

All employees who handle contaminated laundry will utilize personal protective equipment to prevent contact with blood or other potentially infectious materials.

Laundry at this facility will be cleaned at

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(Employers should note here if the laundry is being sent off site. If the laundry is being sent off site, then the laundry service accepting the laundry is to be notified, in accordance with section (d) of the standard).

## **HEPATITIS B VACCINE**

All employees who have been identified as having exposure to blood or other potentially infectious materials will be offered the Hepatitis B vaccine, at no cost to the employee. The vaccine will be offered within 10 working days of their initial assignment to work involving the potential for occupational exposure to blood or other potentially infectious materials unless the employee has previously had the vaccine or who wish to submit to antibody testing which shows the employee to have sufficient immunity.

Employees who decline the Hepatitis B vaccine will sign a waiver which uses the working in Appendix A of the OSHA standard.

Employees who initially decline the vaccine but who later wish to have it may then have the vaccine provided at no cost. (Employers should list here who has responsibility for assuring that the vaccine is offered, the waivers are signed, etc. Also, the employer should list who will administer the vaccine).

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## POST-EXPOSURE EVALUATION AND FOLLOW-UP

When the employee incurs an exposure incident, it should be reported to (list who has responsibility to maintain records of exposure incidents):

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All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. This follow-up will include the following:

- Documentation of the route of exposure and the circumstances related to the incident.

- If possible, the identification of the source individual and if possible, the status of the source individual will be tested (after consent is obtained) for HIV/HBV infectivity.

- Results of testing of the source individual will be made available to the exposed employee with the exposed employee informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual. (Employers may need to modify this provision in accordance with applicable local laws on this subject. Modifications should be listed here:

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- The employee will be offered the option of having their blood collected for testing of the employee HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status. However, if the employee decides prior to that time that testing will or will not be conducted then the appropriate action can be taken and the blood sample discarded.

- The employee will be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service. These recommendations are currently as follows: (These recommendations may be

listed as an appendix to the plan)

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-The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.

-The following person(s) has been designated to assure that the policy outlined here is effectively carried out as well as to maintain records related to this policy:

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## **INTERACTION WITH HEALTH CARE PROFESSIONALS**

A written opinion shall be obtained from the health care professional who evaluates employees of this facility. Written opinions will be obtained in the following instances:

- 1) When the employee is sent to obtain the Hepatitis B vaccine.
- 2) Whenever the employee is sent to a health care professional following an exposure incident.

Health care professionals shall be instructed to limit their opinions to:

- 1) Whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following an incident.
- 2) That the employee has been informed of the results of the evaluation, and
- 3) That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials. (Note that the written opinion to the employer is not to reference any personal medical information).

## **TRAINING**

Training for all employees will be conducted prior to initial assignment to tasks where

occupational exposure may occur. Training will be conducted in the following manner:

Training for employees will include the following an explanation of:

- 1) The OSHA standard for Bloodborne Pathogens
- 2) Epidemiology and symptomatology of bloodborne diseases
- 3) Modes of transmission of bloodborne pathogens
- 4) This Exposure Control Plan, i.e. points of the plan, lines of responsibility, how the plan will be implemented, etc.)
- 5) Procedures which might cause exposure to blood or other potentially infectious materials at this facility
- 6) Control methods which will be used at the facility to control exposure to blood or other potentially infectious materials.
- 7) Personal protective equipment available at this facility and who should be contacted concerning
- 8) Post Exposure evaluation and follow-up
- 9) Signs and Labels used at the facility
- 10) Hepatitis B vaccine program at the facility

## **RECORDKEEPING**

All records required by the OSHA standard will be maintained by: (Insert name or department responsible for maintaining records)

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## **DATES**

All provisions required by the standard will be implemented by: (insert date for implementation of the provisions of the standard)

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(employers should list here if training will be conducted using videotapes,

written materials, etc. Also the employer should indicate who is responsible for conducting the training).

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All employees will receive annual refresher training. (Note that this training is to be conducted within one year of the employee's previous training).

The outline for the training material is located (list where the training materials are located).

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# **BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN FOR COLLATERAL JOBS**

Note:

This sample plan is provided for the guidance of employers who have employees with exposure to blood or other potentially infectious materials only as a collateral function of their job. This sample plan is not intended to supersede the requirements detailed in the bloodborne pathogens standard, 29 CFR 1910.1030, as adopted by 803 KAR 2:320. Employers should review the standard for particular requirements which are applicable to their situation. Employers will need to add information relevant to their particular facility in order to develop an effective, comprehensive exposure control plan. Employers should note that the exposure control plan is expected to be reviewed at least on an annual basis and updated when necessary.

## **BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN** **FOR COLLATERAL JOBS**

Facility Name: \_\_\_\_\_

Date of Preparation: \_\_\_\_\_

### **1. PURPOSE**

The purpose of this exposure control plan is to eliminate or minimize employee occupational exposure to blood or other potentially infectious materials as detailed in the Bloodborne Pathogens standard.

### **2. EXPOSURE DETERMINATION**

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment.) This exposure determination is required to list

all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. At this facility the following job classifications (e.g. maintenance crew, janitorial services, first aid responders, etc.) are in this category:

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### 3. **IMPLEMENTATION SCHEDULE AND METHODOLOGY**

OSHA also requires that this plan also include a schedule and method of implementation for the various requirements of the standard. The following complies with this requirement:

#### **COMPLIANCE METHODS**

Universal precautions will be observed at this facility in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual.

Handwashing facilities are also available to the employees who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after incurring exposure. At this facility handwashing facilities are located:

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After removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water.

If employees incur exposure to their skin or mucous membranes then those areas shall be washed or flushed with water as appropriate as soon as feasible following contact.

#### **WORK PRACTICES**

All procedures will be conducted in a manner which will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials. Methods which will be employed at this facility to accomplish this goal are:

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**PERSONAL PROTECTIVE EQUIPMENT**

All personal protective equipment used at this facility will be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

Protective clothing will be provided to employees in the following manner: (List how the clothing will be provided to employees, e.g. at first aid stations, also who has responsibility for distribution, etc., and also list which procedures would require the protective clothing and the type of protection required, this could also be listed as an appendix to this program)

(The employer could use a checklist as follows:

PERSONAL PROTECTIVE EQUIPMENT	TASK
Gloves	
Protective eye wear (with solid side shield)	
Resuscitation Devices	
Other PPE (List)	

All garments which are penetrated by blood shall be removed immediately or as soon as feasible. All personal protective equipment will be removed prior to leaving the work area. The following protocol has been developed to facilitate leaving the equipment at the work area: (list where equipment will be placed)

Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes. Gloves will be available from:



(state location and/or person who will be responsible for distribution of gloves)

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Gloves will be used for the following procedures:

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Disposable gloves used at this facility are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

## **HOUSEKEEPING**

Decontamination of areas which have been contaminated with blood or other potentially infectious materials will be accomplished by utilizing the following materials: (list the materials which will be utilized, such as fresh bleach solutions or EPA registered germicides)

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All contaminated work surfaces will be decontaminated as soon as feasible.

## **HEPATITIS B VACCINE**

All employees who have been identified as having exposure to blood or other potentially infectious materials will be offered the Hepatitis B vaccine, at no cost to the employee.

(Employers have the option of choosing one of the following:

- 1) The vaccine will be offered within 10 working days of their initial assignment as a first aid responder unless the employee has previously had the vaccine or who wishes to submit to antibody testing which shows the employee to

- have sufficient immunity, or
- 2) The vaccine will be offered to employees as soon as possible, but in no event later than 24 hours, to all unvaccinated first aid responders who have rendered assistance in the first aid incident involving the presence of blood or other potentially infectious material regardless of whether the employee has actually incurred an exposure

incident as defined by the standard. All incidents of first aid will be reported by the end of the workshift to \_\_\_\_\_ in order to ensure that proper precautions concerning the incident are followed and that the vaccine is offered to unvaccinated employees within 24 hours.

(Employers must identify which option has been chosen)

Employees who decline the Hepatitis B vaccine will sign a waiver which uses the wording in Appendix A (Hepatitis B Vaccine Declination) of the OSHA standard.

Employees who initially decline the vaccine but who later wish to have it may then have the vaccine provided at no cost. (Employers should list here who has responsibility for assuring that the vaccine is offered, the waivers are signed, etc. Also the employer should list who will administer the vaccine)

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#### **4. EVALUATION OF CIRCUMSTANCES SURROUNDING EXPOSURE INCIDENTS**

When the employee incurs an exposure incident, it should be reported to (list who has responsibility to maintain records of exposure incidents):

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All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard.

This follow-up will include the following:

- \*Documentation of the route of exposure and the circumstances related to the incident;
- \*If possible, the identification of the source individual and, if possible, the status of the source individual. The blood of the source individual will be tested (after consent is obtained) for HIV/HBV infectivity;
- \*Results of testing of the source individual will be made available to the exposed employee with the exposed employee informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual; (Employers may need to modify this provision in accordance with applicable local laws on this subject. Modifications should be listed here:

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- \*The employee will be offered the option of having their blood collected for testing of the employees HIV/HBV serological status. The blood sample will be preserved for at least 90 days to allow the employee to decide if the blood should be tested for HIV serological status. However, if the employee decides prior to that time that testing will be conducted then the appropriate action can be taken and the blood sample discarded;
- \*The employee will be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service. These recommendations are currently as follows: (these recommendations may be listed as an appendix to the plan); and

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- \*The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.

The following person(s) has been designated to assure that

the policy outlined here is effectively carried out as well as to maintain records related to this policy:

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## **INTERACTION WITH HEALTH CARE PROFESSIONALS**

Certain information is required to be provided to the health care professional responsible for providing an employee with the Hepatitis B vaccine and also certain

information is required to be provided to the health care professional who conducts an evaluation of an employee following an exposure incident. This informational requirement is listed in paragraph (f)(4) of the standard. (the employer should state here how this informational requirement will be accomplished, such as who has the responsibility for assuring that the information is transmitted to the health care professional)

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A written opinion shall be obtained from the health care professional who evaluates employees of this facility. Written opinions will be obtained in the following instances:

- 1) When the employee is sent to obtain the Hepatitis B vaccine.
- 2) Whenever the employee is sent to a health care professional following an exposure incident.

Health care professionals shall be instructed to limit their opinions to:

- 1) Whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following an incident
- 2) That the employee has been informed of the results of the evaluation, and
- 3) That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials. (Note that the written opinion to the employer is not to reference

any personal medical information)

## TRAINING

Training for all employees will be conducted prior to initial assignment to tasks where occupational exposure may occur. Training will be conducted in the following manner:

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Training for employees will include the following an explanation of:

- 1) The OSHA standard for Bloodborne Pathogens.
- 2) Epidemiology and symptomatology of bloodborne diseases.
- 3) Modes of transmission of bloodborne pathogens.
- 4) This Exposure Control Plan, i.e. points of the plan, lines of responsibility, how the plan will be implemented, etc.).
- 5) Procedures which might cause exposure to blood or other potentially infectious materials at this facility.
- 6) Control methods which will be used at the facility to control exposure to blood or other potentially infectious materials.
- 7) Personal protective equipment available at this facility and who should be contacted concerning.
- 8) Post Exposure evaluation and follow-up.
- 9) Signs and labels used at the facility.
- 10) Hepatitis B vaccine program at the facility.

(Employers should list here if training will be conducted using videotapes, written material, etc. Also the employer should indicate who is responsible for conducting the training as well as the qualifications of the trainer(s). )

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All employees will receive annual refresher training. (Note that this training is to be conducted within one year of the employee's previous training.)

The outline for the training material is located (list where the training materials are located.)

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## **RECORDKEEPING**

All records required by the OSHA standard will be maintained by (insert name or department responsible for maintaining records and for ensuring that the confidentiality requirements of the standard will be met):

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Signature

Date

# MOST FREQUENTLY ASKED QUESTIONS CONCERNING THE BLOODBORNE PATHOGENS STANDARD

## Introduction

On December 6, 1991, the Occupational Safety and Health Administration (OSHA) promulgated the Occupational Exposure to Bloodborne Pathogens Standard. This standard is designed to protect approximately 5.6 million workers in the health care and related occupations from the risk of exposure to bloodborne pathogens, such as the Human Immunodeficiency Virus and the Hepatitis B Virus.

As a result of the standard, numerous questions have been received on how to implement the provisions of the standard. The purpose of this handout is to provide answers to some of the more commonly asked questions related to the Bloodborne Pathogens Standard. It is not intended to be used as a substitute for the standard's requirements. Please refer to the standard for the complete text.

## SCOPE

### **Q. Who is covered by the standard?**

- A. The standard applies to all employees who have occupational exposure to blood or other potentially infectious materials (OPIM). Occupational exposure is defined as "reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or OPIM that may result from the performance of the employee's duties.

Blood is defined as human blood, human blood components, and products made from human blood.

OPIM is defined as the following human body fluids: saliva in dental procedures, semen, vaginal secretions, cerebrospinal, synovial, pleural, pericardial, peritoneal, and amniotic fluids; body fluids visibly contaminated with blood; along with all body fluids in situations where it is difficult or impossible to differentiate between body fluids; unfixed human tissues or organs (other than intact skin); HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture media or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

### **Q. Will the Bloodborne Pathogens Standard apply to employees in agriculture, maritime, and construction industries?**

- A. The standard will not apply to agriculture. The standard applies to maritime in shipyards and boatyards (where 29 CFR 1910 applies), in commercial fishing vessels, towboats, barges, tugs and other vessels where OSHA has jurisdiction. However, the standard does not apply to longshoring and marine terminals. The construction industry is covered by the standard in the State of Kentucky.

### **Q. Are volunteers and students covered by the standard?**

A. Volunteers and students may be covered by the standard depending on a variety of factors including compensation.

**Q. Are physicians who are not employees of the hospital in which they work covered by the standard?**

A. Physicians of professional corporations are considered employees of that corporation. The corporation which employs these physicians may be cited by OSHA for violations affecting those physicians. The hospital where the physician practices may also be held responsible as the employer who created or controlled the hazard. Physicians who are sole practitioners or partners are not considered employees under the OSH Act, and therefore, are not covered by the protections of the standard. However, if a non-incorporated physician were to create a hazard to which hospital employees were exposed, it would be consistent with current OSHA policy to cite the employer of the exposed employees for failure to provide the protections of the Bloodborne Pathogens Standard.

**Q. My company supplies contract employees to health care facilities. What are my responsibilities under the Bloodborne Pathogens Standard?**

A. OSHA considers personnel providers, who send their own employees to work at other facilities, to be employers whose employees may be exposed to hazards. Since your company maintains a continuing relationship with its employees, but another employer (your client) creates and controls the hazard, there is a shared responsibility for assuring that your employees are protected from workplace hazards. The client employer has the primary responsibility for such protection, but the "lessor employer" likewise has a responsibility under the Occupational Safety and Health Act. In the context of OSHA's standard on Bloodborne Pathogens, 29 CFR 1910.1030, your company would be required, for example, to provide the general training outlined in the standard; ensure that employees are provided with the required vaccination; and provide proper follow-up evaluations following an exposure incident. Your clients would be responsible, for example, for providing site-specific training and personal protective equipment, and would have the primary responsibility regarding the control of potential exposure conditions. The client, of course, may specify what qualifications are required for supplied personnel, including vaccination status. It is certainly in the interest of the lessor employer to ensure that all steps required under the standard have been taken by the client employer to ensure a safe and healthful workplace for the leased employees. Toward that end, your contracts with your clients should clearly describe the responsibilities of both parties in order to ensure that all requirements of the regulation are met.

**Q. We have employees who are designated to render first aid. Are they covered by the standard?**

A. Yes. If employees are trained and designated as responsible for rendering first aid or medical assistance as part of their job duties, they are covered by the protections of the standard. However, OSHA will consider it a de minimis violation - a technical violation carrying no penalties - if employees, who administer first aid as a collateral duty to their routine work assignments, are not offered the pre-exposure hepatitis B vaccination, provided that a number of conditions are met. In these circumstances, no citations will be issued.

The de minimis classification for failure to offer hepatitis B vaccination in advance of exposure does not apply to personnel who provide first aid at a first aid station, clinic, or dispensary, or to the health care, emergency response or public safety personnel expected



to render first aid in the course of their work.

Exceptions are limited to persons who render first aid only as a collateral duty, responding solely to injuries resulting from workplace incidents, generally at the location where the incident occurred. To merit the de minimis classification, the following conditions also must be met:

- Reporting procedures must be in place under the exposure control plan to ensure that all first aid incidents involving exposure are reported to the employer before the end of the work shift during which the incident occurs.
- Reports of first aid incidents must include the names of all first aid providers and a description of the circumstances of the accident, including date and time, as well as a determination of whether an exposure incident, as defined in the standard, has occurred.
- Exposure reports must be included on a list of such first aid incidents that is readily available to all employees and provided to OSHA upon request.
- First aid providers must receive training under the Bloodborne Pathogens Standard that covers the specifics of the reporting procedures.
- All first aid providers who render assistance in any situation involving the presence of blood or other potentially infectious materials, regardless of whether or not a specific exposure incident occurs, must have the vaccine made available to them as soon as possible but in no event later than 24 hours after the exposure incident. If an exposure incident as defined in the standard has taken place, other post-exposure follow-up procedures must be initiated immediately, per the requirements of the standard.

**Q. Are employees such as housekeepers, maintenance workers, or janitors covered by the standard?**

- A. Housekeeping workers in health care facilities may have occupational exposure to bloodborne pathogens, as defined by the standard. Individuals who perform housekeeping duties, particularly in patient care and laboratory areas, may perform tasks, such as cleaning blood spills and handling regulated wastes, which constitute occupational exposure.

While OSHA does not generally consider maintenance personnel and janitorial staff employed in non-health care facilities to have occupational exposure, it is the employer's responsibility to determine which job classifications or specific tasks and procedures involve occupational exposure. For example, OSHA expects products such as discarded sanitary napkins to be discarded into waste containers which are lined in such a way as to prevent contact with the contents. But at the same time, the employer must determine if employees can come into contact with blood during the normal handling of such products from initial pick-up through disposal in the outgoing trash. If OSHA determines, on a case-by-case basis, that sufficient evidence of reasonably anticipated exposure exists, the employer will be held responsible for providing the protections of 29 CFR 1910.1030 to the employees with occupational exposure.

## **EXPOSURE CONTROL**

**Q. What is an exposure control plan?**

- A. The exposure control plan is the employer's written program that outlines the protective measures an employer will take to eliminate or minimize employee exposure to blood or OPIM.

The exposure control plan must contain at a minimum: (1) the exposure determination which identifies job classifications and, in some cases, tasks and procedures where there is occupational exposure to blood and OPIM; (2) the procedures for evaluation the circumstances surrounding an exposure incident; and (3) a schedule of how and when other provisions of the standard will be implemented, including methods of compliance, HIV and HBV research laboratories and productions facilities requirements, hepatitis B vaccination and post-exposure follow-up, communication of hazards to employees, and recordkeeping.

**Q. In the exposure control plan, are employers required to list specific tasks that place the employee at risk for all job classifications?**

- A. No. If all the employees within a specific job classification perform duties where occupational exposure occurs, then a list of specific tasks and procedures is not required for that job classification. However, the job classification (e.g., "nurse") must be listed in the plan's exposure determination and all employees within the job classification must be included under the requirements of the standard.

**Q. Can tasks and procedures be grouped for certain job classifications?**

- A. Yes. Tasks and procedures that are closely related by be grouped. However, they must share a common activity, such as "vascular access procedure," or "handling of contaminated sharps."

**Q. Does the exposure control plan need to be a separate document?**

- A. No. The exposure control plan may be part of another document, such as the facility's health and safety manual, as long as all components are included. However, in order for the plan to be accessible to employees, it must be a cohesive entity by itself or there must be a guiding document which states the overall policy that comprise the plan. For small facilities, the plan's schedule and method of implementation of the standard may be an annotated copy of the final standard that states on the document when and how the provision of the standard will be implemented. Larger facilities could develop a broad facility program, incorporating provision from the standard that apply to their establishments.

**Q. How often must the exposure control plan be reviewed?**

- A. The standard requires an annual review of the exposure control plan. In addition, whenever changes in tasks, procedures, or employee positions affect or create new occupational exposure, the existing plan must be reviewed and updated accordingly.

**Q. Must the exposure control plan be accessible to employees?**

- A. Yes, the exposure control plan must be accessible to employees, as well as to OSHA and NIOSH representatives. The location of the plan may be adapted to the circumstances of a particular workplace, provided that employees can access a copy at the workplace during the workshift. If the plan is maintained solely on computer, employees must be trained to operate the computer.

A hard copy of the exposure control plan must be provided within 15 working days of the employee's request in accordance with 29 CFR 1910.20.

**Q. What should be included in the procedure for evaluating an exposure incident?**

- A. The procedure for evaluation an exposure incident shall include:  
the engineering controls and work practices in place, the protective equipment or

clothing used at the time of the exposure incident, an evaluation of the policies and

"failures of control" at the time of the exposure incident.

## **METHODS OF CONTROL**

### **Universal Precautions**

**Q. What is meant by the term Universal Precautions?**

A. Universal Precautions is OSHA's required method of control to protect employees from exposure to all human blood and OPIM. The term, "Universal Precautions," refers to a concept of bloodborne disease control which requires that all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

**Q. Can Body Substance Isolation (BSI) be adopted in place of Universal Precautions?**

A. Yes. Body Substance Isolation is a control method that defines all body fluids and substances as infectious. BSI incorporates not only the fluids and materials covered by the standard but also expands coverage to include all body substances. BSI is an acceptable alternative to Universal Precautions, provided facilities utilizing BSI adhere to all other provisions of the standard.

### **Engineering Controls**

**Q. What are engineering controls?**

A. The term, "Engineering Controls," refers to controls (e.g., sharps disposal containers, needleless systems, self-sheathing needles) that isolate or remove the bloodborne pathogens hazards from the workplace.

**Q. What are some examples of devices that could be used in lieu of needles or open needles?**

A. Some examples of devices which offer an alternative to using open needles include stop cocks (on-off switch) and needleless systems which can be used in place of open needles to connect intravenous lines. Needle-protected systems offer an alternative to the use of needles.

**Q. Are employers required to provide these needle devices?**

A. The standard requires that engineering and work practice controls be used to eliminate or minimize employee exposure. While employers do not automatically have to institute the most sophisticated controls (such as the ones listed in the above question), it is the employer's responsibility to evaluate the effectiveness of existing controls and review the feasibility of instituting more advanced engineering controls.

**Q. Is recapping of needles allowed?**

A. Bending, recapping, or removing contaminated needles by hand is prohibited, except under certain circumstances. In those situations where bending, removal or recapping is required by a specific medical procedure or no alternative is feasible, recapping or needle-

removal is permitted by some method other than the traditional two-handed procedure (e.g., a mechanical device or a one hand scoop method). For example, these actions may be necessary when performing blood gas analyses; when inoculating a blood culture bottle; administering incremental doses of a medication to the same patient; or removing the needle from a phlebotomy collection apparatus, such as a vacutainer. An acceptable means of demonstrating that no alternative to bending, recapping, or removing contaminated needles is feasible or that such action is required by a specific medical procedure would be a written justification included as part of the exposure control plan. This justification must state the basis for the employer's determination that no alternative is feasible or must specify that a particular medical procedure requires for example, the bending of the needle and the use of forceps to accomplish this. Shearing or breaking contaminated needles is completely prohibited by the standard.

**Q. How should reusable sharps (e.g., large bore needles, scalpels, saws, etc.) be handled?**

- A. Reusable sharps must be placed in containers which are puncture-resistant, leakproof on the sides and bottom, and properly labeled/color-coded until they are reprocessed.

Contaminated reusable sharps must not be stored or reprocessed in a manner that would require the employee to reach by hand into containers.

**Work Practices**

**Q. Can employees of an ambulance medical rescue service eat or drink inside the cab of the unit?**

- A. Employees are allowed to eat and drink in an ambulance cab only if the employer has implemented procedures to permit employees to wash up and change contaminated clothing prior to entering the ambulance cab, has prohibited the consumption, handling, storage, and transport of food and drink in the rear of the vehicle, and has procedures to ensure that patients and contaminated materials remain behind the separating partition.

**Q. What alternatives are acceptable if soap and running water are not available for handwashing?**

- A. Antiseptic hand cleaner in conjunction with clean cloth/paper towels or antiseptic towelettes are examples of acceptable alternatives to running water. However, when these types of alternatives are used, employees must wash their hands (or other affected areas) with soap and running water as soon as feasible. This alternative would only be acceptable at worksites where soap and running water are not feasible.

**Q. What are the labeling exemptions for specimens?**

- A. The labeling exemption, listed in section (d)(2)(xiii)(A) of the standard, applies to facilities that handle all specimens with Universal Precautions provided the containers are recognizable as containing specimens. This exemption applies only while these specimens remain within the facility. Also, all employees who will have contact with the specimens must be trained to handle all specimens with Universal Precautions. If the specimens leave the facility (e.g., during transport, shipment, or disposal), a label or red color-coding is required.

**Q. Do specimens have to be double-bagged?**

- A. Secondary containers or bags are only required if the primary container is contaminated

on the outside. Also, if the specimen could puncture the primary

container, a secondary puncture-resistant container is required. All specimen containers, primary and secondary, must be closed, properly labeled or color-coded (except as described above) and must prevent leakage.

**Q. Are employers required to decontaminate equipment prior to servicing or shipping?**

- A. The standard requires that all equipment that may be contaminated must be examined and decontaminated as necessary prior to servicing or shipping. If complete decontamination is not feasible, the equipment must be labeled with the required biohazard label which also specifically identifies which portions of the equipment remain contaminated. In addition, the employer must ensure that this information is conveyed to the affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping.

**Personal Protective Equipment**

**Q. What type of personal protective equipment (PPE) should employees in a dental office wear?**

- A. The standard requires that PPE be "appropriate". PPE will be considered "appropriate" only if it does not permit blood or OPIM to pass through to, or reach, the skin, employees' underlying garments, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time that the PPE will be used. This allows the employer to select PPE based on the type of exposure and the quantity of blood or OPIM which can be reasonably anticipated to be encountered during performance of a task or procedure.

**Q. Who is responsible for providing PPE?**

- A. The financial responsibility for repairing, replacing, cleaning, and disposing of PPE rests with the employer. The employer is not obligated under the standard to provide general work clothes to employees, but is responsible for providing PPE. If laboratory jackets or uniforms are intended to protect the employee's body or clothing from contamination, they are to be provided by the employer.

**Q. Does protective clothing need to be removed before leaving the work area?**

- A. Yes. OSHA requires that personal protective equipment be removed prior to leaving the work area. While "work area" must be determined on a case-by-case basis, a work area is generally considered to be an area where work involving occupational exposure occurs or where the contamination of surfaces may occur.

**Q. What type of eye protection do I need to wear when working with blood or OPIM?**

- A. The use of eye protection would be based on the reasonable anticipation of facial exposure. Masks in combination with eye protection devices such as glasses with solid side shields, goggles, or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or OPIM may be generated, and eye, nose, or mouth contamination can be reasonably anticipated.

**Gloves**

**Q. Are gloves required during phlebotomy procedures?**

- A. Gloves must be worn by employees whenever any vascular access procedure is performed, including phlebotomy.

**Q. When should gloves be changed?**

- A. Disposable gloves shall be replaced as soon as practical after they have become contaminated, or as soon as feasible if they are torn, punctured, or their ability to function as a barrier is compromised. Hands must be washed after the removal of gloves used as PPE, whether or not the gloves are visibly contaminated.

**Q. Are gloves required when giving an injection?**

- A. Gloves are not required to be worn when giving an injection as long as hand contact with blood or other potentially infectious materials is not reasonably anticipated.

**Q. What are some alternatives when an employee is allergic to the gloves provided?**

- A. Hypoallergenic gloves, glove liners, powderless gloves or other similar alternatives must be provided for employees who are allergic to the gloves that are normally provided.

**Housekeeping**

**Q. What type of disinfectant can be used to decontaminate equipment or working surfaces which have come in contact with blood or OPIM?**

- A. EPA registered tuberculocidal disinfectants are appropriate for the cleaning of blood or OPIM. A solution of 5.25 percent sodium hypochlorite, (household bleach), diluted between 1:10 and 1:100 with water, is also acceptable for cleaning contaminated surfaces.

Quaternary ammonium products are appropriate for use in general housekeeping procedures that do not involve the cleanup of contaminated items or surfaces.

The particular disinfectant used, as well as the frequency with which it is used, will depend upon the circumstances in which a given housekeeping task occurs (i.e., location within the facility, type of surface to be cleaned, type of soil present, and tasks and procedures being performed). The employer's written schedule for cleaning and decontamination should identify such specifics on a task-by-task basis.

**Regulated Waste**

**Q. What does OSHA mean by the term 'regulated waste'?**

- A. The Bloodborne Pathogens Standard uses the term, "regulated waste," to refer to the following categories of waste which require special handling at a minimum; (1) liquid or semi-liquid blood or OPIM; (2) items contaminated with blood or OPIM and which would release these substances in a liquid or semi-liquid state if compressed; (3) items that are caked with dried blood or OPIM and are capable of releasing these materials during handling; (4) contaminated sharps; and (5) pathological and microbiological wastes containing blood or OPIM.

**Q. Are feminine hygiene products considered regulated waste?**

- A. OSHA does not generally consider discarded feminine hygiene products, used to absorb menstrual flow, to fall within the definition of regulated waste. The intended function of products such as sanitary napkins is to absorb and contain blood. The absorbent material of which they are composed would, under most circumstances, prevent the release of liquid or semi-liquid blood or the flaking off of dried blood.

OSHA expects these products to be discarded into waste containers which are properly lined with plastic or wax paper bags. Such bags should protect the employees from physical contact with the contents.

At the same time, it is the employer's responsibility to determine the existence of regulated waste. This determination is not based on actual volume of blood, but rather on the potential to release blood, (e.g., when compacted in the waste container). If OSHA determines, on a case-by-case basis, that sufficient evidence of regulated waste exists, either through observation, (e.g., a pool of liquid in the bottom of a container, dried blood flaking off during handling), or based on employee interviews, citations may be issued.

**Q. How should sharps containers be handled?**

- A. Each sharps container must either be labeled with the universal biohazard symbol and the word "biohazard" or be color-coded red. Sharps containers shall be maintained upright throughout use, replaced routinely, and not be allowed to overfill. When removing sharp containers from the area of use, the containers shall be:

Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;

Placed in a secondary container if leakage is possible. The second container shall be:

Closable:

Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and

Labeled or color-coded according to paragraph (g)(1)(i) of the standard.

Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

Upon closure, duct tape may be used to secure the lid of a sharps container as long as the tape does not serve as the lid itself.

**Q. Where should sharp containers be located?**

- A. Sharp containers must be easily accessible to employees and located as close as feasible to the immediate area where sharps are used (e.g., patient care areas) or can be reasonably anticipated to be found (e.g., laundries).

In areas, such as correctional facilities and psychiatric units, there may be difficulty placing sharps containers in the immediate use area. If a mobile cart is used in these areas, an alternative would be to lock the sharps container in the cart.

**Q. What type of container should be purchased to dispose of sharps?**

- A. Sharps containers are made from a variety of products from cardboard to plastic. As long as they meet the definition of a sharps container, (i.e., containers must be closable, puncture resistant, leakproof on sides and bottom, and labeled or color-coded), OSHA

would consider them to be of an acceptable composition.

**Q. How do I dispose of waste?**

A. Regulated waste shall be placed in containers which are:

Closable;

Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

Labeled or color-coded in accordance with paragraph (g)(1)(i) of the standard; and

Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

If outside contamination of the regulated waste container occurs, it shall be placed in a second container. The second container shall be:

Closable;

Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport, or shipping;

Labeled or color-coded in accordance with paragraph (g)(1)(i) of the standard; and

Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

Disposal of all regulated waste shall be in accordance with applicable regulations of the United States, States and Territories, and political subdivisions of States and Territories.

**Q. Do I need to autoclave waste before disposing? What is the proper procedure to autoclave?**

A. There is no specific requirement to autoclave waste before disposal. However, under the section on HIV and HBV Laboratories and Production Facilities, there is a requirement stating that all regulated waste from the facilities must be either incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens. In addition, research laboratories must have an autoclave available for decontamination of regulated waste while production facilities must have an autoclave available within or near as possible to the work area, also for the decontamination of regulated waste.

**Laundry**

**Q. What does OSHA mean by the term 'contaminated laundry'?**

A. Contaminated laundry means laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

**Q. How should contaminated laundry be handled?**

A. Contaminated laundry shall be handled as little as possible with a minimum of agitation. Contaminated laundry shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use. Other requirements include:

Contaminated laundry shall be placed and transported in bags or containers labeled or color-coded in accordance with paragraph (g)(1)(i) of the standard. When a facility utilizes Universal Precautions in the handling of all soiled laundry,

alternative labeling or color-coding is sufficient if it permits all employees to



recognize the containers as requiring compliance with Universal Precautions.

Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through or leakage from the bag or container, the laundry shall be placed and transported in bags or containers which prevent soak-through and/or leakage of fluids to the exterior.

The employer shall ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.

When a facility ships contaminated laundry off-site to a second facility which does not utilize Universal Precautions in the handling of all laundry, the facility generating the contaminated laundry must place such laundry in bags or containers which are labeled or color-coded in accordance with paragraph (g)(1)(i) of the standard.

**Q. Are employees allowed to take their protective equipment home and launder it?**

A. Employees are not permitted to take their protective equipment home and launder it. It is the responsibility of the employer to provide, launder, repair, replace, and dispose of personal protective equipment.

**Q. Do employers have to buy a washer and dryer to clean employees' personal protective equipment?**

A. There is no OSHA requirement stipulating that employers must purchase a washer and dryer to launder protective clothing. It is an option that employers may consider. Another option is to contract out the laundering of protective clothing. Finally, employers may choose to use disposable personal protective clothing and equipment.

**Q. Are there guidelines to be followed when laundering personal protective equipment? What water temperature and detergent types are acceptable?**

A. The decontamination and laundering of protective clothing should be handled by washing and drying the garments according to the clothing manufacturer's instructions.

## **HIV AND HBV RESEARCH LABORATORIES AND PRODUCTION FACILITIES**

**Q. Are academic research laboratories included in the definition of a research laboratory under the standard?**

A. Academic research laboratories are included in the definition of a research laboratory under the standard. A research laboratory produces or uses research laboratory scale amounts of HIV and HBV. Although research laboratories may not have the volume found in production facilities, they deal with solutions containing higher viral titers than those normally found in patients' blood.

**Q. Is animal blood used in research covered under the laboratory section of the standard?**

A. The standard covers animal blood only for those animals purposely infected with HIV or HBV. Although the standard does not apply to animal blood unless the animal has been purposely infected with HIV or HBV, persons handling animals or animal blood should follow general precautions as recommended by the Centers for Disease Control/National Institutes of Health Publication, Biosafety in Microbiological and Biomedical Laboratories (Publication No. 88-8395).

## **HEPATITIS B VACCINATION AND POST-EXPOSURE FOLLOW-UP PROCEDURES**

**Q. Who must be offered the hepatitis B vaccination?**

- A. The hepatitis B vaccination series must be made available to all employees who have occupational exposure. The employer does not have to make the hepatitis B vaccination available to employees who have previously received the vaccination series, who are already immune as their antibody tests reveal, or who are prohibited from receiving the vaccine for medical reasons.

**Q. When should the hepatitis B vaccination be offered to employees?**

- A. The hepatitis B vaccination must be made available within 10 working days of initial assignment, after appropriate training has been completed. This includes arranging for the administration of the first dose of the series. In addition, see pages 3 and 4 of this booklet for vaccination of designated first aiders.

**Q. Can pre-screening be required for hepatitis B titer? Post-screening?**

- A. No. The employer cannot require an employee to take a pre-screening or post-vaccination serological test. An employer may, however, decide to make pre-screening available at no cost to the employee. Routine post-vaccination serological testing is not currently recommended by the CDC unless an employee has had an exposure incident, and then it is also to be offered at no cost to the employee.

**Q. If an employee declines the hepatitis B vaccination, can the employer make up a declination form?**

- A. If an employee declines the hepatitis B vaccination, the employer must ensure that the employee signs a hepatitis B vaccine declination. The declination's wording must be identical to that found in Appendix A of the standard. A photocopy of the Appendix may be used as a declination form, or the words can be typed or written onto a separate document.

**Q. Can employees refuse the vaccination?**

- A. Employees have the right to refuse the hepatitis B vaccine and/or any post-exposure evaluation and follow-up. It is important to note, however, that the employee needs to be properly informed of the benefits of the vaccination and post-exposure evaluation through training. The employee also has the right to decide to take the vaccination at a later date if he or she so chooses. The employer must make the vaccination available at that time.

**Q. Can the hepatitis B vaccination be made a condition of employment?**

- A. OSHA does not have jurisdiction over this issue.

**Q. Is a routine booster dose of hepatitis B vaccine required?**

- A. Because the U.S. Public Health Service (USPHS) does not recommend routine booster doses of hepatitis B vaccine, they are not required at this time. However, if a routine booster dose of hepatitis B vaccine is recommended by the USPHS at a future date, such booster doses must be made available at no cost to those eligible employees with occupational exposure.

**Q. Whose responsibility is it to pay for the hepatitis B vaccine?**

- A. The responsibility lies with the employer to make the hepatitis B vaccine and vaccination, including post-exposure evaluation and follow-up, available at no cost to the employees.

**Q. What information must the employer provide to the health care professional following an exposure incident?**

- A. The health care professional must be provided with a copy of the standard, as well as the following information:

A description of the employee's duties as they relate to the exposure incident;  
Documentation of the route(s) and circumstances of the exposure; the results of the source individual's blood testing, if available; and  
All medical records relevant to the appropriate treatment of the employee, including vaccination status, which are the employer's responsibility to maintain.

**Q. What serological testing must be done on the source individual?**

- A. The employer must identify and document the source individual if known, unless the employer can establish that identification is not feasible or is prohibited by state or local law. The source individual's blood must be tested as soon as feasible, after consent is obtained, in order to determine HIV and HBV testing must be provided to the evaluating health care professional. Also, the results of the testing must be provided to the exposed employee. The exposed employee must be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

**Q. What if consent cannot be obtained from the source individual?**

- A. If consent cannot be obtained and is required by state law, the employer must document in writing that consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood if available shall be tested and the results documented.

**Q. When is the exposed employee's blood tested?**

- A. After consent is obtained, the exposed employee's blood is collected and tested as soon as feasible for HIV and HBV serological status. If the employee consents to the follow-up evaluation after an exposure incident, but does not give consent for HIV serological testing, the blood sample must be preserved for 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested for HIV, testing must be done as soon as feasible.

**Q. What information does the health care professional provide to the employer following an exposure incident?**

- A. The employer must obtain and provide to the employee a copy of the evaluating health care professional's written opinion within 15 days of completion of the evaluation. The health care professional's written opinion for hepatitis B is limited to whether hepatitis B vaccination is indicated and if the employee received the vaccination. The written opinion for post-exposure evaluation must include information that the employee has been informed of the results of the evaluation and told about any medical conditions resulting from exposure that may further require evaluation and treatment. All other findings or diagnoses must be kept confidential and not included in the written report.

**Q. What type of counseling is required following an exposure incident?**

- A. The standard requires that post-exposure counseling be given to employees following an exposure incident. Counseling should include USPHS recommendations for prevention of HIV. These recommendations include refraining from blood, semen, or organ donation; abstaining from sexual intercourse or using measures to prevent HIV transmission during sexual intercourse; and refraining from breast feeding infants during the follow-up period. In addition, counseling must be made available regardless of the employee's decision to accept serological testing.

**Q. What information about exposure incidents is recorded on the OSHA 200 log?**

- A. All occupational bloodborne pathogens exposure incidents, (e.g., needlesticks, lacerations, splashes), must be recorded on the OSHA 200 log as an injury if the incident results in one of the following:

The incident is work-related and involves the loss of consciousness, a transfer to another job, or restriction of work or motion.

The incident results in a recommendation of medical treatment, (e.g., hepatitis B immune globulin, hepatitis B vaccine, or zidovudine).

The incident results in a diagnosis of seroconversion. The serological status of the employee is not recorded on the OSHA 200 log. If a case of seroconversion is known, it is recorded on the 200 as an injury, (e.g., "needle-stick"), rather than "seroconversion".

**COMMUNICATION OF HAZARDS TO EMPLOYEES**

**Q. When are labels required?**

- A. A warning label that includes the universal biohazard symbol, followed by the term "biohazard," must be included on bags/containers of contaminated laundry, on bag/containers of regulated waste, on refrigerators and freezers that are used to store blood or OPIM, and on bags/containers used to store, dispose of, transport, or ship blood or OPIM (e.g., specimen containers). In addition, contaminated equipment which is to be serviced or shipped must have a readily observable label attached which contains the biohazard symbol and the word "biohazard" along with a statement relating which portions of the equipment remain contaminated.

**Q. What are the required colors for the labels?**

- A. The background must be fluorescent orange or orange-red or predominantly so, with symbols and lettering in a contrasting color. The label must be either an integral part of the container or affixed as close as feasible to the container by a string, wire, adhesive, or other method to prevent its loss or unintentional removal.

**Q. Can there be substitutes for the labels?**

- A. Yes. Red bags or red containers may be substituted for the biohazard labels.

**Q. What are the exceptions to the labeling requirement?**

- A. Labeling is not required for:

Containers of blood, blood components, and blood products bearing an FDA required label that have been released for transfusion or other clinical uses.

Individual containers of blood or OPIM that are placed in secondary labeled containers during storage, transport, shipment, or disposal.

Specimen containers, if the facility uses Universal Precautions when handling all specimens, the containers are recognizable as containing specimens, and the containers remain within the facility.

Laundry bags or containers, containing contaminated laundry, may be marked with an alternative label or color-coded provided the facility uses Universal Precautions for handling all soiled laundry and the alternative marking permits all employees to recognize the containers as requiring compliance with Universal Precautions. If contaminated laundry is sent off-site for cleaning to a facility which does not use Universal Precautions in the handling of all soiled laundry, it must be placed in a bag or container which is red in color or labeled with the biohazard label described above.

Regulated waste that has been decontaminated.

**Q. Does OSHA accept Department of Transportation's (DOT) labels for waste and specimens which will be shipped or transported?**

- A. The labeling requirements do not preempt either the U.S. Postal Service labeling requirements (39 CFR Part III) or the Department of Transportation's Hazardous Materials Regulations (49 CFR Parts 171-181).

DOT labeling is required on some transport containers (i.e., those containing "known infectious substances"). It is not required on all containers for which 29 CFR 1910.1030 requires the biohazard label. Where there is an overlap between the OSHA-mandated label and the DOT-required label, the DOT label will be considered acceptable on the outside of the transport container provided the OSHA-mandated label appears on any internal containers which may be present. Containers serving as collection receptacles within a facility must bear the OSHA label since these are not covered by the DOT requirements.

**Q. Which employees must be trained?**

- A. All employees with occupational exposure must receive initial and annual training.

**Q. Should part-time and temporary employees be trained?**

- A. Part-time and temporary employees are covered and are also to be trained on company time.

**Q. Who has the responsibility for training workers employed by agencies which provide personnel (e.g., nurses) to other employers?**

- A. As stated in a similar answer on pages 2 and 3, OSHA considers personnel providers, who send their own employees to work at other facilities, to be employers whose employees may be exposed to hazards. Since personnel providers maintain a continuing relationship with their employees, but another employer (your client) creates and controls the hazard, there is a shared responsibility for assuring that your employees are protected from workplace hazards. The client employer has the primary responsibility for such protection, but the "lessor employer" likewise has a responsibility under the Occupational Safety and Health Act.

In the context of OSHA's standard on Bloodborne Pathogens, the personnel provider would be required to provide the general training outlined in the standard. The client employer would be responsible for providing site-specific training.

The contract between the personnel provider and the client should clearly describe the

training responsibilities of both parties in order to ensure that all training requirements of the standard are met.

**Q. What are the qualifications that a person must possess in order to conduct employee training regarding bloodborne pathogens?**

- A. The person conducting the training is required to be knowledgeable in the subject matter covered by the elements in the training program and be familiar with how the course topics apply to the workplace that the training will address. The trainer must demonstrate expertise in the area of occupational hazards of bloodborne pathogens.

**Q. Where could information be obtained for conducting training on the Bloodborne Pathogens Standard?**

- A. OSHA's Office of Information and Consumer Affairs (OICA) has developed brochures, factsheets, and a videotape on the standard. Single copies of the brochure and factsheets can be obtained by writing OSHA Publications, 200 Constitution Avenue, NW, Room N3101, Washington, DC 20210 or by calling (202) 219-8148. The videotape is available through the National AudioVisual Center and the number is (703) 487-4650. All information available through OICA should be used as a supplement to the employer's training program. Other sources of information include local Area and Regional OSHA Offices. In addition, each Regional Office has a Bloodborne Pathogens Coordinator who answers compliance and related questions on the standard.

**Q. Who are some examples of persons who could conduct training on the bloodborne standard?**

- A. Examples of health care professionals include infection control practitioners, nurse practitioners, and registered nurses. Non-health care professionals include industrial hygienists, epidemiologists or professional trainers, provided that they can demonstrate evidence of specialized training in the area of bloodborne pathogens.

## **RECORDKEEPING**

**Q. What is contained in the medical record?**

- A. The medical record includes the name and social security number of the employee; a copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations, and any medical records relative to the employee's ability to receive the vaccination; copies of all results of examinations, medical testing, and the follow-up procedures; copies of the healthcare professional's written opinion; and a copy of the information provided to the healthcare professional.

**Q. Who keeps the medical records?**

- A. The employer is responsible for the establishment and maintenance of medical records. However, these records may be kept off-site at the location of the healthcare provider.

**Q. How long must the medical records be kept?**

- A. Medical records must be kept for the duration of employment plus 30 years.

**Q. What is included in the training record?**

- A. The training record contains the dates of the training, the contents or a summary of the

training sessions, the names and job titles of all persons attending the training, and the names and qualifications of the persons conducting the training.

**Q. How long must the training records be kept?**

A. Training records must be retained for 3 years from the training date.

**NOTES:**



For information concerning the Occupational safety and health standards, regulations interpretations and actions of the Kentucky Occupational Safety and Health Standards Board, contact:

**Department of Workplace Standards  
Office of Occupational Safety and Health  
Frankfort, Kentucky 40601  
(502) 564-3070**

For information concerning Occupational Safety and Health training, consultation, technical assistance, publications and OSH recordkeeping forms, contact:

**Department of Workplace Standards  
Division of Education and Training  
Frankfort, Kentucky 40601  
(502) 564-3070**  
Kimberlee C. Perry  
Director

For information concerning occupational safety and health enforcement, contact:

**Department of Workplace Standards  
Division of Compliance  
Frankfort, Kentucky 40601  
(502) 564-3070**

**Kentucky Labor Cabinet  
Department of Workplace Standards**  
<http://labor.ky.gov>

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